

Remarks

In the above-mentioned Final Rejection Claims 9-20, 27-33 and 44-57 were allowed. Applicant acknowledges with appreciation the allowance of those claims which remain in the application.

In that Final Rejection Claims 39-41 were objected to. Claim 39 has herein been amended to be in independent format. Accordingly, Claim 39 and Claims 40 and 41 depending therefrom are in allowable condition.

Claims 21 and 22 were rejected over Banko ('342). Claim 21 has been amended to simply include the elements of Claim 22, and Claim 22 has been accordingly cancelled. The Examiner in his rejection stated that "[a]s the fluid empties the vacuum level increases since the pump is still running, thus the control signal is considered to be proportional to the vacuum level when the line 70 is still emptying." Applicant respectfully disagrees.

The transducer (item 60) shown in Fig. 2 of Banko '342 does not sense the decrease in pressure rise in vacuum as the Examiner contends. The transducer senses flow rates only. Vacuum level increase might be inferred through conventional wisdom when flow rates decrease (similar to supposing voltage = amperage without regarding system resistance), but this is not so. The transducer output signal is strictly proportional to flow rate only and is not proportional to vacuum level.

Further, the transducer (item 60 of Banko '342) does not generate a pump control signal proportional to the vacuum in the aspiration fluid conduit when the pump is operating.

Claim 34 was rejected over Kelman in view of Douvas, and dependent Claim 37 further in view of Banko ('342). Claim 34

has been amended to include the elements of Claim 37, which was accordingly cancelled. The Examiner in his rejection stated that Douvas shows the source of irrigation liquid at 36 tied to aspiration line 26. Applicant respectfully disagrees. Element 36 is a back-flush infusion bottle; it is not the source of irrigation liquid from which the irrigation fluid conduit means conducts the irrigation liquid to the surgical site. (This source rather appears to be continuous infusion bottle 48.) The Douvas patent states at Col. 6, lines 39-42 that the "intermediate infusion bottle 36 is used for backflow or 'backflushing' of the aspiration line . . ."

Claim 34 calls for "a liquid pressure equalizing means for admitting irrigation liquid from the source of irrigation liquid to said aspiration fluid conduit means when a blockage occurs therein to vent the vacuum therein." Such is not suggested by Douvas.


The Examiner further contended that the "pressure equalizing conduit" element of Claim 37 was suggested by Banko ('342) by line 58. Surge fluid line 58 however merely communicates to the surge fluid source 55, and does not provide communication for the irrigation liquid from the source of irrigation liquid (40) to the aspiration fluid conduit means (83). Banko does not admit irrigation liquid from the source of irrigation liquid to the aspiration fluid conduit means when a blockage occurs. Rather, fluid from a separate surge fluid supply 55 is applied.

Since the amendment to Claim 21 simply adds thereto the elements of dependent Claim 22, the amendment to Claim 34 simply adds thereto the elements of dependent Claim 37, and Claim 39 is

simply rewritten in independent form, no new issues are herein presented. Accordingly, entry of this Amendment for purposes of appeal is in order and is respectfully requested.

Respectfully submitted,

Date: June 8, 1988

  
Douglas N. Larson  
Reg. No. 29,401

Vorys, Sater, Seymour & Pease  
1828 L Street, N.W.  
Suite 1111  
Washington, D.C. 20036  
(202) 822-8200